

What is claimed is:

506
82

1. A reading system for reading a writable optical disc having an information writing track, a guiding track for introducing a laser beam to the information writing track, and prepit information including address information recorded on the guiding track, the system comprising:

a first photodetector having photodetecting elements divided at least by a first dividing line optically parallel with a tangential direction of the information writing track of the disc for detecting reflected light of a first laser beam irradiated to the information writing track,

a second photodetector having photodetecting elements divided at least by a second dividing line optically parallel with the tangential direction of the information writing track of the disc for detecting reflected light of a second laser beam irradiated to the guiding track,

first difference signal producing means for producing a first difference signal based on a difference between outputs of the photodetecting elements of the first photodetector being divided by the first dividing line,

second difference signal producing means for producing a second difference signal based on a difference between outputs of the photodetecting elements of the second photodetector being divided by the second dividing line, and

tracking error signal producing means for producing a tracking error signal based on subtracting the second difference signal, a level of which is adjusted, from the first difference signal.

2. The reading system according to claim 1, wherein the second photodetector is further divided by a third dividing line optically parallel with a radial direction of the optical disc, and

third difference signal producing means for producing a third difference signal is provided based on a difference between outputs of photodetecting elements divided by the third dividing line, the prepit information being obtained based on the third difference signal.

3. A reading system for reading a writable optical disc having an information writing track, a guiding track for introducing a laser beam to the information writing track, and prepit information including address information recorded on the guiding track, the system comprising:

a first photodetector having photodetecting elements divided at least by a first dividing line optically parallel with a tangential direction of the information writing track of the disc for detecting reflected light of a first laser beam irradiated to the information writing track,

a second photodetector having photodetecting elements divided at least by a second dividing line optically parallel with the tangential direction of the information writing track of the disc for detecting reflected light of a second laser beam irradiated to the guiding track,

a first subtractor for producing a first difference signal based on a difference between outputs of the photodetecting elements of the first photodetector being divided by the first dividing line,

a second subtractor for producing a second difference signal based on a difference between outputs of the photodetecting elements of the second photodetector being divided by the second dividing line,

a multiplier for multiplying the first difference signal by a predetermined value; and

a third subtractor for subtracting an output of the multiplier from the first difference signal to produce a tracking error signal.

4. The reading system according to claim 3, wherein the second photodetector is further divided by a third dividing line optically parallel with a radial direction of the optical disc, and

a third subtractor for producing a third difference signal is provided based on a difference between outputs of photodetecting elements divided by the third dividing line, the prepit information being obtained based on the third difference signal.

Add
B3
117